

Glossary

Have you read a word you don't understand? Find it in this glossary. Or, you can look for new words to surprise your parents, teachers, and friends with!

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A

Abiotic: nonliving things in the environment (ex. Dirt, rocks, air, etc.)

Absorption: the "taking-in" of fluids or other substances (A sponge *absorbs* water)

Acclimatize: to adapt to a new climate, environment, or anything new

Acidity: a substance with a pH of less than 7.0 (see *pH*)

Acid Rain: rain with a pH less than 7.0, having the potential to harm the environment

Adaptation: ability of an organism to adjust to environmental changes

Aggregate: granular material (ex. Sand, gravel)

Alkaline: a substance with a pH over 7.0 (opposite of an acid)

Altricial: totally helpless at birth (usually unfeathered (if it's a bird) or nearly furless, blind, and unable to move very well

Anadromous: a behavior pattern that some fish follow, wherein reproduction occurs in freshwater, but adult life occurs in the ocean

Aquatic: things growing in, living in, or pertaining to water

B

Backwater: water which forms an area of slow or standing water, partially isolated from the main water flow

Bank Erosion: erosion of the bank caused by wave action, water current, or surface erosion

Barrier: any physical, chemical, or biological obstacles to aquatic organisms

Bathymetric Map: a map depicting the depth of the bottom of a body of water

Bedrock: a huge solid rock—often goes deep beneath the surface of the earth

Benthic Organisms: animals/bugs that live on the bottom of a body of water (also called *benthos*)

Biomass: the average total weight of living organisms in an area per unit area

Biome: an extensive community of organisms living together (ex. Desert, grasslands, tundra, etc.)

Biotic: a living organism (opposite of *abiotic*)

Bogs: poorly drained freshwater wetlands that are characterized by a build-up of peat and mosses

Brackish: water with a higher salt content than freshwater, but less salty than seawater

Buoyancy: the ability of an object to float in water

Buteos: large, high-flying hawks with wings designed specifically for soaring and whose main prey is rodents (mice, gophers, etc.)

Butte: an isolated, semi-flat-topped geologic formation (there are many of these in the Deschutes Forest! Ex. Mt. Bachelor, Black Butte, Pilot Butte, etc.)

C

Canopy: overhead cover of branches in a forest

Canyon: a deep gorge with steep sides, usually created from the erosion from a stream or river

Cape: a piece of land sticking out into a body of water

Carnivore: an animal that only eats (or mostly eats) meat

Carrion: the meat of a dead animal; rotting meat

Channel: a waterway which holds flowing water

Chute: rapidly flowing water within narrow, steep slots of bedrock

Climate: the overall weather that characterizes a location (ex. Average temperature, precipitation, wind, etc. which can be expected to occur)

Community: two or more populations of organisms which interact in a defined time and space

Conductivity: measure of the ability of a substance to carry an electrical current

Confluence: the location where two or more streams or rivers flow together and join

Contamination: pollution or harmful substances which make an area impure

Coriolis Effect: a phenomenon caused by the earth's rotation which causes water currents

Courting: trying to attract the attention of a potential mate (sort of like flirting!)

Cryptodepression: portion of a lake below sea level

Culvert: a passage (usually a pipe) which allows water to pass under or over a road or other obstruction

Current: the speed at which the water is moving in a certain direction

D

Dam: a barrier which obstructs the water flow beyond it and increases the water surface elevation upstream (caused naturally through flooding or a falling tree, or made by beavers or people)

Debris: any material moved by water—logs, rocks, leaves, etc.

Deposition: the settling of debris from the water when the water no longer has enough force to carry it

Detritus: bits of vegetation, animal remains, and other organic material that provides food for many organisms at the base of food chains in wetlands and many other kinds of habitats.

Discharge: the rate at which a volume of water flows past a point (usually expressed as cubic feet per second or *CFS*)

Diurnal: an event, process, or change that occurs every day

Diversity: the variation that exists between organisms, environments, habitats, etc. in a given geographic location

Dredging: the process of digging up and removing material from wetlands or from the bottoms of waterways to clear them or make them deeper or wider.

E

Ecosystem: living and nonliving components which interact forming a complete environmental unit

Eddy: a circular current of water—these can be quite strong and swimmers should be careful when swimming around them

Erosion: the process of wearing away stream banks or other geologic formations by such processes as weathering, water-flow, traffic, etc.

Estuary: a place where a freshwater stream or river mixes with the ocean, so that the water is very diluted saltwater

Evaporation: the transition of liquid to the gaseous state due to an excess of energy or heat

Eyries: eagle nests

F

Fault: a geologic phenomenon which marks tectonic activity—often indicated by a fracture or crack

Fish Ladder: usually an artificial channel built to help fish to climb around an obstruction, especially dams

Fjord: a narrow inlet along the coast formed by glacial erosion

Flash Flood: rapid increase in streamflow due to surface runoff

Fledgling: a baby bird with all its feathers; baby bird ready to start flying

Floodplain: area known to become covered with water during flooding

Fluvial: relating to streams or rivers

G

Geomorphology: the study of the origin of landforms, the processes that create and shape them, and their material composition

Geothermal: heat from inside the earth

Geyser: hot water spring which intermittently erupts as a fountain of hot water and steam due to the pressure of the heat trapped inside the earth (Old Faithful in Yellowstone National Park is a geyser)

Global Positioning System (GPS): system of satellites in permanent orbit above the earth that allow a receiver to triangulate (determine from three points) their position on or above the earth's surface

Gradient: the change in elevation, or slope, of an area

Granivore: an animal that only eats nuts and grains

H

Habitat: a "mini" ecosystem composed of living and nonliving components interacting in a specific way for an organism, population, or community

Hardwater: water with large concentrations of alkaline actions derived from carbonates, chlorides, and sulfates of calcium and magnesium

Herbivore: an animal that only eats plants

Homogenous: uniform in chemical composition

Homothermous: uniform in temperature

Humus: the dark organic material of soils that is formed through the decomposition of organic matter

Hydraulics: the motion and action of water and other liquids

Hydrophyte: plants that grow in water or saturated soils

Hygrophyte: plants restricted to growing in or on moist sites

I

Iceberg: large floating mass of ice

Impermeable: a layer of material that does not allow the passage of a liquid or gas

Impervious: a material through which water cannot pass through without much difficulty

Indicator Organisms: organisms that respond predictably to various environmental changes and so can be watched to determine environmental stability

Indigenous: an organism native to a particular area

Insectivore: an animal that only eats insects

Insolation: exposure to sunlight

Intermittent: water that flows or exists sporadically or periodically

Inundation: to be covered with water

Inverse Estuary: estuary where evaporation exceeds the freshwater inflow plus precipitation so that the water becomes brackish or even predominantly salty

Irrigation: the channeling or moving of water from its natural area to an area needing extra water (a technique often used by farmers)

Isthmus: narrow strip of land connecting two larger land areas (like the isthmus of Panama which connects North and South America)

J

K

L

Lacustrian: lake-dwelling

Lagoon: small, shallow, pond-like body of water that is connected to a larger body of water (also the name of an amusement park in Utah!)

Landslide: downslope movement of soil, rock, or debris

Lentic: an aquatic system with standing or slow flowing water, like a lake, swamp, marsh, etc.

Lenticels: tiny pores (holes) into which oxygen passes, on the roots or branches of trees.

Littoral: shallow shore area where light can penetrate to the bottom to support aquatic plants

M

Macroinvertebrate: an invertebrate animal (without a backbone) large enough to see without magnification

Macrophyte: a plant that can be seen without the aid of magnification

Marine: relating to the ocean

Meltwater: water that originates from the melting of snow or ice

Meteoric Water: water derived from precipitation (ex. rain, snow, sleet, etc.)

Mineral Spring: spring with water containing lots of dissolved minerals

Mire: slimy soil or deep mud

Moraine: irregular, superficial geologic deposit of sand, rock, and debris left by a retreating glacier. Sometimes they cause *moraine lakes*—this is when the moraine acts as a dam, holding the water back.

Morphology: physical attributes of a water body and the methods for measuring those attributes

Morphometry: the physical shape of a water body, such as a stream, lake, or reservoir

Mouth: the downstream end of a stream or river

N

Native Species: plant and animal species that occur naturally in aquatic and terrestrial (land) habitats

Navigable: waterways which are deep enough and safe enough to be used for transportation

Nekton: actively swimming organisms which are able to move independently of water current (if you were to swim, you could be considered a nekton!)

Neutral Estuary: type of estuary where neither the freshwater inflow nor evaporation predominate

Niche: the behavior of an organism, particularly in reference to its eating habits (sort of like its "job" or what it does)

Nutrient: element or compound essential for growth, development, and life for living organisms such as oxygen, nitrogen, phosphorus, and potassium

Nutrient Depletion: situation where the amount of nutrients are being used faster than they are being produced so that the amount of nutrients are going down. An area that is farmed a lot often shows nutrient depletion.

O

Oasis: isolated fertile area with vegetation in an arid region that is supplied with water from a well or spring

Omnivore: an animal that eats meat and plants

Organism: any living thing composed of one or more cells

Oscillation: repeated, regular fluctuation above and below some average value

Outlet: opening or passage that allows water to flow from one place to another

Overflow Channel: channel which is usually dry but through which water runs during periods of high runoff

Oxbow: bend or meander in a stream that becomes detached from the stream channel

P

Peat: partially decomposed organic—mostly plant— material, deposited under waterlogged, oxygen-poor conditions. Burnt for fuel in some places (esp. in the United Kingdom)

Percolation: downward movement of water through soil, sand, gravel, or rock

Pesticide: any chemical used to control populations of organisms which are considered "pests"

pH: the measure of acidity and alkalinity of a solution, measured on a scale of 0 (highly super acidic!) to 14 (super highly basic). A pH of 7.0 is considered neutral and is what pure water measures

Photophobic: an organism that avoids light

Physicochemical: the physical and chemical characteristics of an ecosystem

Plankton: small plants (phytoplankton) and animals (zooplankton) that are carried by the water currents

Pollution: matter or energy (usually of human origin) which produces unnatural and/or unwanted side-effects on natural systems

Positive Estuary: an estuary system wherein the freshwater inflow plus precipitation is greater than evaporation, so that the seawater is greatly diluted

Potamology: the study of biological, chemical, geological, and physical aspects of rivers

Precipitation: water, hail, sleet, and snow, etc. (basically all the wet stuff that falls out of the sky!)

Predators: animal that hunt other animals for food

Prey: animal that gets hunted and eaten by other animals (predators)

Q

Quick Sand: soft or loose sand saturated with spring or stream water so that it sinks when weight is placed upon it

R

Rain Shadow: Area of reduced precipitation on the leeward (the side opposite from the direction from which the clouds are coming) side of mountains that results from the interception of the moisture by the mountains

Raptor: birds of prey which are carnivorous and have a strong, notched beak, sharp talons with snapping tendons (includes hawks, owls, falcons, etc.)

Rearing Habitat: areas in a body of water where larval and juvenile fish find food and shelter to live and grow

Redd: nest excavated in the substrate by a fish for spawning where fertilized eggs are deposited and develop until the eggs hatch and emerge from the gravel

Reducers: organisms (like bacteria and fungi) that break down organic materials into simpler compounds

Regurgitated: already chewed, swallowed, and partially digested food that then "thrown-up"; some birds feed their babies regurgitated food until they are old enough to eat and digest the food on their own.

Relief: change in elevation of a land surface between two points

Reservoir: a natural or artificial storage area for water, often created with a dam and regulated

Riparian Areas: areas along the banks of rivers, streams, and/or other bodies of water. These areas are sensitive but vital to healthy habitat systems

Riparian Vegetation: vegetation (plants) growing on or near the banks of a stream or other body of water

Runoff: natural drainage of water away from an area

Rush: a hollow-stemmed grass-like marsh plant

S

Saline: soil or water containing sufficient salts to interfere with the growth of most plants

Salinity: the relative concentration of salts in water

Salt Flat: flat land covered with a surface layer of salts

Salt Water Intrusion: invasion of saltwater into freshwater

Saprobic: organisms that live on dead or decaying matter (YUCK!)

Saturated: full; containing all of the fluids it can possibly hold

Sechi Disk: a disk 20 of 50 cm in diameter with alternating white and black sections that is lowered into water to measure the visibility

Sedge: a grass-like plant with solid stems growing in tufts in marshes

Sediment: particles of sand, soil, and minerals that are washed from the land and settle on the bottoms of wetlands and other aquatic habitats

Sessile: organisms that are attached to an object and cannot move freely (barnacles and anemones are examples of sessile organisms in the ocean)

Sewage: refuse liquids, including human waste, carried off by the sewers

Sinuosity: the "curviness" of a river or stream channel

Skid Road: a road or trail used by loggers to drag trees from the site they were logged to a more convenient loading site

Slough: low swamp-like area in a marshy area or a tidal channel in a salt marsh

Snag: standing, dead tree, from which the needles and most of the branches have fallen

Softwater: freshwater with a low alkalinity, conductivity, or salinity

Soil Creep: the gradual downslope movement of soil by gravity

Solar Radiation: the electromagnetic energy from the sun

Solute: substance that will dissolve in a solution

Spring: site where groundwater flows naturally to the surface of the ground

Stagnant: water with little or no circulation and low levels of dissolved oxygen, making very poor fish habitat

Stenobathic: refers to an organism that is restricted to living at a specific water depth

Stenotherm: organisms that have a very narrow temperature tolerance

Stocking: the release of birds, fish, or other wildlife into a given habitat area (lakes with heavy fishing are often stocked with fish annually)

Stratification: the arrangement of water into distinct layers which differ by temperature and density (occurs in the ocean and deep lakes especially)

T

Tailings: mining waste from screening or processing mineral ore

Tailwater: water below a dam

Talus: slope accumulation of rock fragments at the base of a cliff

Terrain: comprehensive term describing the landscape with respect to its features; what it looks like

Thermal: related to warm temperatures or heat

Tidal Flat: land that is regularly covered with ocean water from high tides

Tide: the rising and falling of the ocean waters which generally occurs twice a day

Tolerance: the ability of an organism to endure or adapt to unfavorable situations or environmental conditions (do you have a high tolerance level?)

Topography: the shape of the earth's surface

Transect: a line (imaginary or real) across the ground along which observations are made or tests taken

Transpiration: the process in plants where water is released as vapor into the air (primarily through pores in the leaves called *stomata*)

Tributary: stream that flows into or joins a larger stream or river

Turbidity: the relative clarity of water

Tussock: Clumps or thick tufts of vegetation forming a more solid surface in a wetland

U

Undertow: a strong current below the surface of a water body which moves in a different direction than the surface current

Unsaturated: able to hold more moisture than it does

Upwelling: movement of a cooler water mass from the bottom of a body of water to the surface

V

Vegetation: plant-life in an area (also known as *flora*)

Viscosity: the "runniness" of a liquid

Viscous Water: water which has been thickened to slow surface run-off

W

Wadi: Channel of a water course that is dry except in periods of rainfall

Watercycle: the recycling of water that takes water from the earth's surface, to the atmosphere and back again in a neverending cycle

Watershed: area that contains water that drains into a stream or river or lake

Water Table: depth below which the ground is saturated with water (if you start digging a hole, you will reach the water table at the point when your hole starts to naturally get water in the bottom)

Wean: stop feeding the babies so that while they start feeding themselves

Weathering: the decomposition and disintegration of something due to its exposure to the weather

Wetland: an area that is wet for at least part of the year, and which supports plants and animals that are adapted to living in a watery environment

X

Xeric: dry areas with little rainfall

Xerophytic: plant species which have adapted to living in conditions and areas which are very dry

Y

Z

Zone: area characterize by similar flora (plants) or fauna (animals)

Zooplankton: microscopic animals which are carried by the water's current